

6 August 2007

LETTER OF INTENT

FOR

THE DESIGN, PROCUREMENT AND INSTALLATION
OF THE COMMUNICATION SYSTEMS

Winder Health Clinic Add/Alt, Sand Hill
13,356 SF Addition (1391 dated 16 Jan 2007)
901 SF Alteration (1391 dated 16 Jan 2007)

SUBJECT: Communications responsibilities for the Add/Alt Winder Health Clinic,
Fort Benning, Sand Hill (BRAC 2005 / FY2008 / PN 62956 Health Clinic)

1. References:

a. ER 1110-3-110, Information Systems Design In Support of Military
Construction, dated 30 APR 92.

b. Appendix A, IM/IT Systems Checklist for the following systems:
Premises Distribution System (Data); Premises Distribution System (Voice);
Addressable Fire Alarm System; Nurse Call System / Tone Visual; Public Address
System; Patient/Education Television System; Intrusion Detection System; Close
Circuit Television (Security); Door Access System.

2. Purpose: This Letter of Intent is written to more clearly define and to document
mutual agreement in regards to the roles and responsibilities of various agencies
and organizations involved in the design, procurement, and installation of the
communications systems for the subject projects. Delineating the responsibilities
of each agency/organization will enable a fully functional system to be provided
that meets the needs of the User on time and within budget. Agencies and
organizations with responsibilities herein further defined include:

- a. Fort Benning Director of Information Management (DOIM)
- b. Health Facilities Planning Agency, IM/IT
- c. U. S. Army Corps of Engineers, Savannah, Georgia
- d. Martin Army Community Hospital IMD

3. General:

- a. The Subject project will provide state of the art telecommunications for

the add / alteration of Winder Health Clinic at Fort Benning, Project Number 62956.

b. Communication systems for this project that must be addressed by the Design Build Contractor and/or the responsible agencies/organizations include:

1) Telephone system (voice and data), to include: (see Appendix A)

i. Outside plant (outside 5-ft line). This will include extensions for copper cabling and fiber optics cabling to include: connections, extension to the new additions via existing underground conduit duct bank system, communications manholes/handholes; all necessary equipment/resources needed to extend connectivity from existing cable locations at Communications Manhole EX7S-1 and building 3306.

ii. Inside plant (inside 5-ft line) premises distribution system (PDS), including cable trays, cabling, outlets, terminal blocks, backboards, and patch panels for voice and data networks. The PDS is to include both copper and fiber cables.

2) Public Address (PA) and Paging System (Appendix A).

3) Intercom System, via the telephone system. (Appendix A)

4) Security and Access Control Systems. (Appendix A)

5) Fire Alarm System, via radio transmitter. (Appendix A)

6) Television System, for entertainment and education. (Appendix A)

7) Nurse call system (Appendix A)

8) Facsimile outlets at selected locations, as defined by HFPO-E

c. Existing Conditions:

1) The project will be constructed as an add / alteration to the existing Winder Health clinic so all services into the new addition will of course be new. Currently there are only 25 pair of copper cable supporting the building which is not enough copper to support the additional clinic space.

2) Winder Health Clinic has two demarcation points coming into the building. These demarcation points connect Winder Health Clinic to the DOIM Wide Area Network. One of these fiber optic connections enters the building where the new addition will be constructed. This connection

(fiber optic cable) must be removed prior to construction thereby necessitating a temporary fiber optic connection to service approximately one half of the existing Winder Health Clinic. Obviously this temporary connection must be established prior to any construction to prevent any loss of connectivity. The cost for this temporary connection was not factored into the most recent version of the 1391.

d. Project Work, Copper Cable: This project will use the existing manhole (EX7S-1) and existing duct bank system from the current facility to the new addition in accordance with the project plans. A new manhole may be necessary to accommodate the new addition to Winder Health Clinic, this additional manhole was factored into the 1391. The project will provide and install a new 100 pair copper cable from the new addition.

e. Project Work, Fiber Cable: The project will provide and install an additional 12 strand single mode fiber from the RSU (building 3000) to building 3306. The route will be in accordance with the project plans and utilize existing ducts. The DOIM Remote Switching Unit (RSU), building 3000 is the connection point for the Winder Health clinic to the Fort Benning Wide Area Network (WAN).

4. Responsibilities: The responsibilities of each agency involved are defined below.

a. Fort Benning DOIM will be responsible for:

1) Performing a technical review of the overall communications systems design.

2) Coordinating with and providing information to the A&E communications consultant when requested and as necessary for their design of (or provision for) telephone (voice and data), intercom, intrusion detection, fire alarm, television, and EMCS systems.

3) Provide 100 Copper pairs and a 12 Strand Single Mode fiber to building 3306 to support the new Winder Health clinic addition. DOIM will use the existing manhole EX7S-1 to support voice and data requirements for the new addition. One or two additional man holes may be required for the Winder Health clinic add/alt project.

4) Provide a current cost for telephone set types and line cards to the A&E contractor, HFPA, and COE Fort Benning. Ensure all voice instruments are connected properly to the nearest telephone switch and have the proper class of service.

5) Assuring that relevant changes to existing communications systems are conveyed to the U.S. Army Corps of Engineers and to the Design Bid Build

contractor for their consideration and incorporation as appropriate.

6) Provide the A/E contractor with the Fort Benning Martin Army Community Hospital cable installation and drop labeling standards.

7) Due to the two demarcation points coming into the Winder Health Clinic, MACH IMD and DOIM must ensure the contractor has provided a temporary Fiber Optic link to the data switch on the side of the building where construction will take place, otherwise AHLTA, Internet, and email connectivity will be unavailable.

b. U.S. Army Health Facilities Planning Agency will be responsible for:

- 1) Establish functional requirements
- 2) Define specific intrusion detection, closed circuit television system requirements, and nurse call system (if applicable).
- 3) Performing a functional review of the overall communications systems design.
- 4) Providing oversight and be the technical proponent responsible for the medical criteria and standards as they relate to the design of the telephone/data system.
- 5) Performing technical review of Design Build contractor communications design, cost estimates and acquisition documents.
- 6) Performing technical review of data and voice communications systems for adequacy and interface with medical operations.

c. U.S. Army Engineer District, Savannah, Georgia, as the Design and Construction Agent, will be responsible for:

- 1) Performing technical and biddability/constructability reviews of the communications systems designed by the Design Build contractor to ensure they meet all criteria and satisfy the needs of the User.
- 2) Providing any required funds to the Fort Benning DOIM for procurement, installation and activation of any new telephone handsets required by the new facility.

d. Martin Army Community Hospital, IMD

- 1) Performing technical review of data and voice communications systems for adequacy and interface with medical operations,

2) Testing all voice, data and fiber optic cables per specifications (does not reduce or eliminate the construction contractor's testing requirements in his contract),

3) Design, procure and install the network electronics (data switches) necessary to connect the Solomon Health clinic addition to the Fort Benning WAN.

4) Provide the necessary fiber patches at the appropriate time to connect the new addition to the Fort Benning Wide Area Network

5) Due to the two demarcation points coming into the Winder Health Clinic, MACH IMD and DOIM must ensure the contractor has provided a temporary Fiber Optic link to the data switch on the side of the building where construction will take place, otherwise AHLTA, Internet, and email connectivity will be lost.

5. Points of Contact:

- a. A&E
- b. DOIM
- c. Facility IMD
- d. Corps of Engineer
- e. CEHNC-ED-MX
- f. HFPA, PM
- g. HFPA, CIO

6. The responsibilities as defined above have been reviewed and approved by each agency. Changes to this Letter of Intent will not be made without the knowledge and concurrence of all involved.

7. If you have any questions, please contact HFPA point of contact.

8. RATIFICATION

This Letter of Intent for the Add / Alt of Winder Health Clinic, Fort Benning, Georgia, Project Number 62956 (PN62956) has been reviewed and is approved.

A&E, Communications Designer

HFPA, PM

DOIM

Facility IMD

Corps of Engineers District PM

HFPA, CIO

Appendix A

IM/IT Systems Checklist Premises Distribution System (Data)

Scope:

The premises distribution system shall consist of inside-plant Horizontal, riser, and backbone cables and connecting hardware to transport telephone and data including LAN) signals between equipment items in a building. The system installation and overall requirements shall be coordinated with Information Management Office (IMO).

Current System Information:

System: Premises Distribution (Data)

Owner: IMD

Specification Section: 27 10 00

SCOPE	DESIGN	PROCURE	INSTALL	FUNDING	NOTES
Provide PDS outlets per drawings and specs	AE	Contractor	Contractor	Project	Coordinate with DOIM and MACH IMD
Terminate Outlets	AE	Contractor	Contractor	Project	
Install Conduit and Cable Tray	AE	Contractor	Contractor	Project	
Provide and Install Category 6 Cable	AE	Contractor	Contractor	Project	Wire to EIA/TIA 568B
Provide Category 6 Patch Panels	AE	Contractor	Contractor	Project	
Terminate Cable at appropriate Patch Panel	AE	Contractor	Contractor	Project	
Label and Test all Cable Color Code Jacks per IMD/DOIM	AE	Contractor	Contractor	Project	Test results IMD, COE and DOIM

Provide and Install Patch Cables	IMD	IMD	IMD	MEDCOM I/O	
Provide and Install Data Switch(s) in Communications Rooms	IMD	IMD	IMD	MEDCOM I/O	
Terminate Fiber, Patch Cables,	IMD	IMD	IMD	MEDCOM I/O	
Provide and Install Fiber Patch Panel	AE	Contractor	Contractor	Project	
Provide and Install Fiber Optic Cable Comm. Rooms to Switch Room	AE	Contractor	Contractor	Project	
Terminate Fiber Cables in Communications Rooms	AE	Contractor	Contractor	Project	

IM/IT Systems Checklist

Premises Distribution System

(Voice)

Scope:

The premises distribution system shall consist of inside-plant horizontal, riser, and backbone cables and connecting hardware to transport telephone and data (including LAN) signals between equipment items in a building. The system installation and overall requirements shall be coordinated with BAMC Information Management Office (IMO) and West Point DOIM.

Current System Information:

System: Premises Distribution (Voice)

Owner: DOIM-IMD

Specification Section: 27 10 00

SCOPE	DESIGN	PROCURE	INSTALL	FUNDING	NOTES
Provide PDS outlets per drawings and specs	AE	Contractor	Contractor	Project	Coordinate with DOIM and IMD
Terminate Outlets	AE	Contractor	Contractor	Project	
Install Conduit and Cable Tray	AE	Contractor	Contractor	Project	Done by electrical contractor
Provide and Install Category 6 Cable	AE	Contractor	Contractor	Project	Wire to EIA/TIA 568B
Provide Category 6 Patch Panels	AE	Contractor	Contractor	Project	
Terminate Cable at appropriate Patch Panel	AE	Contractor	Contractor	Project	
Label and Test all Cable	AE	Contractor	Contractor	Project	Test results to COE and DOIM
Provide and Install Patch Cables	IMD	IMD	IMD	MEDCOM I/O	

Provide and Install IDF in Communications Rooms	AE	Contractor	Contractor	Project	
Terminate Cables on IDF	AE	Contractor	Contractor	Project	
Provide and Install duct-bank and Conduit for all Riser Cable from Main Switch Room to Comm. Rooms	AE	Contractor	Contractor	Project	
Provide and Install Voice Riser Cable Comm. Rooms to MDF	AE	Contractor	Contractor	Project	
Terminate Cables in Communications Room	AE	Contractor	Contractor	Project	
Terminate Voice Cables in Main Switch Room	AE	Contractor	Contractor	Project	DOIM will provide the installation into their active equipment and necessary software changes at the phone switch
Test, Label and Certify Voice Cables	AE	Contractor	Contractor	Project	Test results to COE, IMD and DOIM
Procure and Install Line Cards in PBX as required	AE	DOIM	DOIM	Project	
Provide phone number service request	IMD	IMD	IMD	NA	IMD to provide phone numbering requirement to DOIM 30 days prior to need

IT Systems Checklist

Addressable Fire Alarm System

Scope:

The new devices, as shown on plan drawings, shall be incorporated into existing fire alarm and detection system. The system shall be activated into the alarm mode by actuation of any alarm initiating device. The system shall remain in the alarm mode until initiating device is reset and the fire alarm control panel is reset and restored to normal. Alarm initiating devices shall be connected to signal line circuits (SLC), Style 5, in accordance with NFPA 72. Alarm indicating appliances shall be connected to indicating appliance circuits (IAC), Style Z in accordance with NFPA 72. A two-loop conduit system shall be provided so that if any one conduit and all conductors contained in that conduit are severed all circuits on that circuit shall remain functional. All textual, audible, and visual appliances and systems shall comply with NFPA 72.

Current System Information:

System: Fire Alarm

Owner: Facility Manager/Fire Marshal

Specification Section: 28 31 64 00.10

SCOPE	DESIGN	PROCURE	INSTALL	FUNDING	NOTES
Install and Test Fire Alarm	AE	Contractor	Contractor	Project	Coordinate with Fire Marshal and Facility Manager

IM/IT Systems Checklist

Nurse Call System/Tone Visual

Scope:

The Tone/Visual Nurse Call (TVNC) System provides simultaneous tone and light signaling of patient and staff calls for emergency assistance from designated patient care spaces in clinic areas. The system installation and overall requirements shall be coordinated with the Hospital.

Current System Information:

System: Nurse Call System Tone/Visual

Owner: IMD

Manufacturer:

Model # / Version #:

Date Installed: Existing

Specification Section: 27 52 32 00.10

SCOPE	DESIGN	PROCURE	INSTALL	FUNDING	NOTES
Install and Test TVNC System	AE	Contractor	Contractor	Project	Coordinate with IMD, Nursing and Facility Manager
Procure and Install System Devices	AE	Contractor	Contractor	Project	
Provide and Install TVNC Cable	AE	Contractor	Contractor	Project	Utilize conduit and cable trays installed for Low Voltage
Terminate devices	AE	Contractor	Contractor	Project	
Test System	AE	Contractor	Contractor	Project	
Provide Training	AE	Contractor	Contractor	Project	Coordinate with Nursing, FM, and Medical Maintenance

IM/IT Systems Checklist

Public Address System

Scope:

The Public Address (PA) System shall provide zoned loudspeaker paging and zoned music program distribution throughout the clinic.

Current System Information:

System: Public Address System

Owner: IMD

Specification Section: 27 51 16

SCOPE	DESIGN	PROCURE	INSTALL	FUNDING	NOTES
Install and Test Public Address System	AE	Contractor	Contractor	Project	Coordinate with Hospital, IMD, and Facility Manager
Provide Load Calculations	AE	Contractor	Contractor	Project	PA System must include telephone interface
Install wiring and conduit per drawings	AE	Contractor	Contractor	Project	
Install speakers and amplifiers	AE	Contractor	Contractor	Project	
Test and Provide Written results	AE	Contractor	Contractor	Project	
Training	AE	Contractor	Contractor	Project	Coordinate with FM, Nursing, IMD, and Post Maintenance

IM/IT Systems Checklist

Patient/Educational Television System

Scope:

A complete TV system consisting of a headend component and a distribution component shall be provided.

Current System Information:

System: Patient/Educational Television System

Owner: Installation

Specification Section: 27 05 14.00 10

SCOPE	DESIGN	PROCURE	INSTALL	FUNDING	NOTES
Install and Test Television Signal System	AE	Contractor	Contractor	Project	Coordinate with Nursing IMD, and Facility Manager
Procure and Install head-end equipment in Communications Room	AE	Contractor	Contractor	Project	
Procure and Install CATV outlets per drawings and specs	AE	Contractor	Contractor	Project	
Install CATV Cable	AE	Contractor	Contractor	Project	
Test and Provide Results	AE	Contractor	Contractor	Project	
Provide and Install TV Sets	AE	IMD	IMD	MEDCOM I/O	

IM/IT Systems Checklist

Intrusion Detection System

(If Required)

Scope:

Empty conduit raceways and outlet boxes with blank covers will be provided for the future GFGI installation of an IDS system. The site preparation for this system will include allocation of space in a protected area for a control unit, monitor station and signal processing equipment as well as remote sensors.

Current System Information:

System: Intrusion Detection System (IDS)

Owner: Security Manager

SCOPE	DESIGN	PROCURE	INSTALL	FUNDING	NOTES
Install conduit, junction boxes	AE	Contractor	Contractor	Project	Coordinate with IMD, Post Security, Facility Manager
Procure and Install System Devices	N/A	Government Facility Security/FM	Government Facility Security/FM	MEDCOM I/O	Coordination FM, IM, Security
Training	N/A	Security	Security	MEDCOM I/O	Coordinate with system vendor for staff scheduling and training

IM/IT Systems Checklist

CCTV (Security) System

Scope:

Provisions will be made for GFGI CCTV surveillance equipment. Conduits with pull wires, outlet boxes, and electrical power will be provided for the following suggested locations: drug vaults, acute minor illness waiting and reception areas, corridors connecting buildings, pharmacy dispensing windows, building entrances and exists, loading docks, parking lots, and ground floor mechanical rooms. The system will be designed such that a camera will be activated by an intrusion detection alarm or an attempt at unauthorized access at a card reader. Monitors will be located in a staffed location.

Current System Information:

System: CCTV (Closed Circuit TV) System

Owner: Security Manager

SCOPE	DESIGN	PROCURE	INSTALL	FUNDING	NOTES
Install electric, conduit, junction boxes	AE	Contractor	Contractor	Project	Coordinate with IMD, BAMC Security and Facility Manager
Procure and Install wiring, System Devices	N/A	Government Security	Government Security	MEDCOM I/O	Coordination with FM, IM and Post Security

IM/IT Systems Checklist

Door Access System

(If Required)

Scope:

An electronic door access system will be provided where required by the using Service. The system will be complete and will include all monitor and control equipment and equipment to produce cards to discontinue access authorization for issued cards, maintain and provide a listing of current authorized access by individual, location, and time. An interface will be provided between the CCTV system and the Door Access System to initiate video monitoring and recording anytime these doors are opened unless the card reader has read an authorized access card.

Current System Information:

System: Door Access System

Owner: Security/Facility Manager

Specification Section: 28 16 01 00.10

SCOPE	DESIGN	PROCURE	INSTALL	FUNDING	NOTES
Install Door Access System	AE	Contractor	Contractor	Project	Coordinate with IMD, Security and Facility Manager